JC13 Rec'd PCT/PTO 06 FEB 2002

FORM PTO-1390 (REV. 12-2001) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371

ATTORNEY 'S DOCKET NUMBER

U.S. APPLICATION NO. (if known, see 37 CFR 1.5): 10/049272

INTERNATIONAL APPLICATION NO.	INTERNATIONAL FILING DATE	PRIORITY DATE CLAIMED
WO 01/15132	18.08.2000	19.08.99

TITLE OF INVENTION
CONTROL OF DEPTH MOVEMENT FOR VISUAL DISPLAY WITH LAYERED SCREENS

APPLICANT(S) FOR DO/EO/US
ENGEL, Gabriel, Oamon WITEHIRA, Pita

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☑ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
4. ☐ The US has been elected by the expiration of 19 months from the priority date (Article 31).
5. ☐ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
   a. ☐ is attached hereto (required only if not communicated by the International Bureau).
   b. ☑ has been communicated by the International Bureau.
   c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
   a. ☐ is attached hereto.
   b. ☑ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Aplication under PCT Article 19 (35 U.S.C. 371(c)(3))
   a. ☐ are attached hereto (required only if not communicated by the International Bureau).
   b. ☐ have been communicated by the International Bureau.
   c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
   d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ An English lanugage translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11 to 20 below concern document(s) or information included:

11. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☐ A FIRST preliminary amendment.
14. ☐ A SECOND or SUBSEQUENT preliminary amendment.
15. ☐ A substitute specification.
16. ☐ A change of power of attorney and/or address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.
18. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
20. ☐ Other items or information:

U.S. APP [illegible] 412	INTERNATIONAL APPLICATION NO NO 01/15132	ATTORNEY'S DOCKET NUMBER

21. ☑ The following fees are submitted:

	CALCULATIONS PTO USE ONLY
BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)):	
Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO **$1040.00**	1
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO **$890.00**	
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO **$740.00**	
International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) **$710.00**	
International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) **$100.00**	
ENTER APPROPRIATE BASIC FEE AMOUNT = 1040	$ 1040
Surcharge of **$130.00** for furnishing the oath or declaration later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492(e)).	$

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	$
Total claims	21 - 20 =	1	x **$18.00**	$ 18
Independent claims	6 - 3 =	3	x **$84.00**	$ 252
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ **$280.00**	$ 280
TOTAL OF ABOVE CALCULATIONS =				$ 550
☐ Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.			+	$ 275
SUBTOTAL =				$ 795
Processing fee of **$130.00** for furnishing the English translation later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				$
TOTAL NATIONAL FEE =				$ 795
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). **$40.00** per property +				$
TOTAL FEES ENCLOSED =				$ 795
			Amount to be refunded:	$
			charged:	$

a. ☑ A check in the amount of $ 795.00 to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. _____ in the amount of $ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.

c. ☐ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. _____. A duplicate copy of this sheet is enclosed.

d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

_____
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_____
NAME

_____
REGISTRATION NUMBER

10/049272

WO 01/15132 PCT/NZ00/00160

CONTROL OF DEPTH MOVEMENT FOR VISUAL DISPLAY WITH LAYERED SCREENS

TECHNICAL FIELD

This invention relates to a visual display system.

BACKGROUND ART

Particularly, the present invention relates to a visual display system including multi-level screens which are placed physically apart.

Such screens are described in PCT Application Nos. PCT/NZ98/00098 and PCT/NZ99/00021.

These devices are created by combining multiple layers of selectively transparent screens. Each screen is capable of showing an image. In preferred embodiments the screen layers are liquid crystal display. Preferably the screens are aligned parallel to each other with a pre-set distance between them.

With this device images displayed on the screen furthest from view (background screen) will appear at some distance behind the images displayed on the screen closer to the viewer (foreground screen). The transparent portions in the foreground screen will allow viewers to see images displayed on the background screen.

This arrangement allowing multiple screens allows images to be presented at multiple levels giving the viewer true depth without use of glass or lens.

Up until now, software has been written to create visual sequences on the multi-level screens. These sequences have been mainly passive, mainly for viewing rather than for interaction.

While the visual effect of these sequences is spectacular, it will be desirable if

potential uses of a multi-level screen display could be explored further.

It is an object of the present invention to address this problem, or at least to provide the public with a useful choice.

Aspects of the present invention will now be described by way of example only with reference to the following description.

DISCLOSURE OF INVENTION

According to one aspect of the present invention there is provided a visual display system including

multi-level screens spaced physically apart,

wherein each screen has a two-dimensional plane,

a visual indicator,

an input device,

a user selectable input,

the visual display system being characterised in that

the user can use the user selectable input to move the visual indicator via the input device out of the two-dimensional plane of a particular screen.

According to another aspect of the present invention there is provided a method of using a visual display system which has multi-level screens spaced physically apart,

wherein each screen has a two-dimensional plane,

the visual display system also including

a visual indicator,

an input device,

a user selectable input,

the method characterised by the step of

the user using the selectable input to move the visual indicator out of the two-dimensional plane of a particular screen and on to another screen and on to another screen.

One aspect of the present invention there is provided media containing instructions for the operation of visual display system as described.

In preferred embodiments of the present invention the multi-level screens are similar to that described in PCT Application Nos. PCT/NZ98/00098 and PCT/NZ99/00021, although this should not be seen as limiting.

The term two-dimensional plane refers to the effective viewing plane on a particular screen, similar to that seen on a normal display screen.

The visual indicator may be any type of indicator, for example a cursor, image, icon or screen image. It is envisaged that the visual indicator is something which can move in response to the user of the system via some input mechanism.

The input device may be any suitable input device, for example a mouse, tablet data glove, keyboard, touch screen, joystick, trackball, pen, stylus. touch pad, voice and so forth.

The user selectable input is preferably an input the user can make to effect the operation of software running the display device via the input device.

For example, if the input device is a mouse, then the user selectable input may be a mouse button. If the input device is a joystick, then the user selectable input may be the trigger. If the user input is a keyboard, then the user selectable input may be arrow keys. And so forth.

We envisage that the present invention could be used extensively by those in the graphics industry. Therefore one embodiment in the present invention is envisaged that by having the input device as a pen or stylus, the present invention could be utilised in theses industries to its fullest.

In some embodiments, the user selectable input may actually be a software button on a touch screen that may be independent of the input device. This allows standard input devices and drivers to be used without modification.

In further embodiments of the present invention, the input device shall be referred to as a mouse and the user selectable input shall be referred to as a mouse button. The mouse button may be an existing button on the mouse, or in some embodiments may be a dedicated button for use with the present invention.

This should not be seen as limiting.

The visual indicator shall now be referred to as a cursor, although this should not be seen as limiting.

The user can use a mouse to move a cursor around a display screen as can be achieved with usual software. However, with one embodiment of the present invention, the user can then click a particular mouse button to cause the visual indicator to move from one screen to another screen. In one embodiment the applicant uses the centre button or a configurable button on a three button mouse, but this should not be seen as limiting

An preferred embodiments the software controlling the cursor position is supplemental to usual mouse drives.

Therefore a program can run as usual with standard mouse drive commands but the cursor position between screens can change as a consequence of the interaction of the supplemental program responding to the additional input from the mouse.

This ability enables the user to actually interact with different screens and work on separate screens in terms of having an input device which can interact with whichever screen has been selected. The advantages of this feature are self apparent.

In some embodiments, the movement from the two-dimensional plane of one screen to another screen may be discrete and it may appear that the visual indicator merely jumps from one screen to the other and be at the same x-y coordinate with the only change being in the z axis.

In other embodiments, there may be more of a linear movement perceived as a consequence of the movement from one screen to the other.

For example, the present invention may be used in conjunction with a drawing package. The person drawing may start drawing on the front screen of the visual device using the mouse and cursor.

The person then may wish to take advantage of the three dimensional quality allowed by the present invention and effectively draw in the z axis (the x and y axis having already been drawn in on the two-dimensional screen). This may be achieved by the user clicking the mouse button and dragging the cursor effectively so it appears to pass from one screen to the other screen with an image (say a line) appearing to provide a visual bridge between the front screen and another screen or screens in the background.

In other embodiments of the present invention this ability may be used with particular total screen images. For example, the present invention may be used with an interactive game which gives the impression that the user is moving deep within a scene. For example, the user may be flying a craft in the game and as the user moves forward in the game, the images may pass from the background screen or screens to the foreground screen giving the illusion of full movement. In this embodiment the visual indicator may be the images and the input device a joy-stick.

Aspects of the present invention will now be described with reference to the following drawings which are given by way of example only.

BRIEF DESCRIPTION OF DRAWINGS

Further aspects of the present invention will become apparent from the following description which is given by way of example only and with reference to the accompanying drawings in which:

Figure 1 illustrates one embodiment of the present invention, and

Figure 2 illustrates a second embodiment of the present invention, and

Figure 3 illustrates a third embodiment of the present invention.

BEST MODES FOR CARRYING OUT THE INVENTION

Figures 1a and 1b illustrate a stylised version of one embodiment of the present invention at work. These figures have foreground screens 1 and background screens 2.

It should be appreciated that the reference to just two screens is by way of example only and the present invention may work in relation to multiple numbers of screens.

Figure 1a shows the positioning of the visual indicator 3 in the form of a cursor arrow

on the front foreground screen 1.

In this embodiment of the present invention a simple click of a mouse button causes the cursor 3 to appear in exactly the same x y coordinates as on the foreground screen one, but, positioned on the background screen 2.

Thus in this embodiment, the user selectable input merely does a direct transpose in the z axis between screens.

Figure 2 likewise has a foreground screen 1 and a background screen 2. In Figure 2a. a triangle 4 has been drawn on the x y two-dimensional plane of the foreground screen 1.

In Figure 2b, to give the triangle 4 depth, the user has selected and dragged the image in the x y direction to give not only the image of a triangle 5 on the background screen 2, but also a plane in the z axis 6 for finding a solid-looking representation. As the screens are physically quite separate, the illusion of the solid wall 6 is accomplished by sophisticated software shading techniques.

Figure 3 again has a foreground screen 1 and background screen 2.

This embodiment of the present invention can be used for moving through three-dimensional landscapes. For example, in Figure 3a, there is pictured a flower 7 on the foreground screen, tree 8 along with a cloud 9 are positioned on the background screen 2.

The user may then use the input device to effectively move through the scene visually. This causes the flower depicted in Figure 3a to disappear from the foreground screen as shown in Figure 3b. This also causes the tree 8 to move from the background screen 2 to the foreground screen 1. The cloud 9 being in the far background stays on the background screen 2.

Thus it can be seen that the present invention allows considerable amount of interaction between the user and the screens.

Aspects of the present invention have been described by way of example only and it should be appreciated that modifications and additions may be made thereto without departing from the scope of the appended claims.

NUMBER 2.

CLAIMS:

1. A visual display system including

multi-level screen spaced physically apart,

wherein each screen has a 2 dimensional plane,

a visual indicator,

a input device,

a user selectable input,

the visual display system being characterised in that

the user can use the selectable input to move the visual indicator via the input device out of the 2-dimensional plane, and onto another screen where both screens display images simultaneously.

2. A visual display system as claimed in claim 1 wherein the visual indicator is a cursor.

3. A visual display system as claimed in either claim 1 or claim 2 wherein the input device is a mouse.

4. A visual display system as claimed in any one of claims 1 to 3 wherein the user selectable input is a mouse button.

5. A visual display system as claimed in any one of claims 1 to 4 which includes software supplemental to the software drivers for the input device to cause the visual indicator to move from one screen to another screen.

6. A visual display system as claimed in any one of claims 1 to 5 wherein the visual indicator moves to a different z axis coordinate, but the same x – y coordinate.

7. A visual display system as claimed in any one of claims 1 to 6 wherein the movement of the visual indicator from one screen to another screen gives the appearance of providing a visual bridge between the screens.

8. A visual display system as claimed in any one of claims 1 to 7 wherein the visual indicator is a screen image.

9. A method of using a visual display system which has multi-level screens spaced physically apart,

wherein each screen has a 2 dimensional plane

the visual display system also including

a visual indicator,

a input device,

a user selectable input,

a method of characterised by the step of the user using the selectable input to move the visual indicator out of the 2-dimensional plane and onto another screen, where both screens display images simultaneously.

10. A method as claimed in claim 9 wherein a visual indicator is a cursor.

11. A method as claimed in either claim 9 or claim 10 wherein the input device is a mouse.

12. A method as claimed in any one of claims 9 to 11 wherein the user selectable input is a mouse button.

13. A method as claimed in any one of claims 9 to 12 which includes software supplemental to the software drivers for the input device to cause the visual indicator to move from one screen to another screen.

14. A method as claimed in any one of claims 9 to 13 wherein the visual indicator moves to a different z axis coordinate, but the same x – y coordinate.

15. A method as claimed in any one of claims 9 to 14 wherein the movement of the visual indicator from one screen to another screen gives the appearance of providing a visual bridge between the screens.

16. A method as claimed in any one of claims 9 to 15 wherein the visual indicator is a screen image.

17. A visual display system as claimed in any one of claims 1 to 8 wherein the input device is a pen.

18. A method as claimed in any one of claims 9 to 16 wherein the input device is a pen.

19. A method substantially as herein described with reference to and as illustrated by the company drawings.

20. A method of using a visual display system substantially as herein described with reference to and as illustrated by the accompanying drawings.

21. Media containing instructions for the operation of a visual display system as claimed/or described herein.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(30) Priority Data:
337332 19 August 1999 (19.08.1999) NZ

(71) Applicant *(for all designated States except US)*: **DEEP VIDEO IMAGING LIMITED** [NZ/NZ]; Airport Road, Mystery Creek, RD 2, Hamilton 2001 (NZ).

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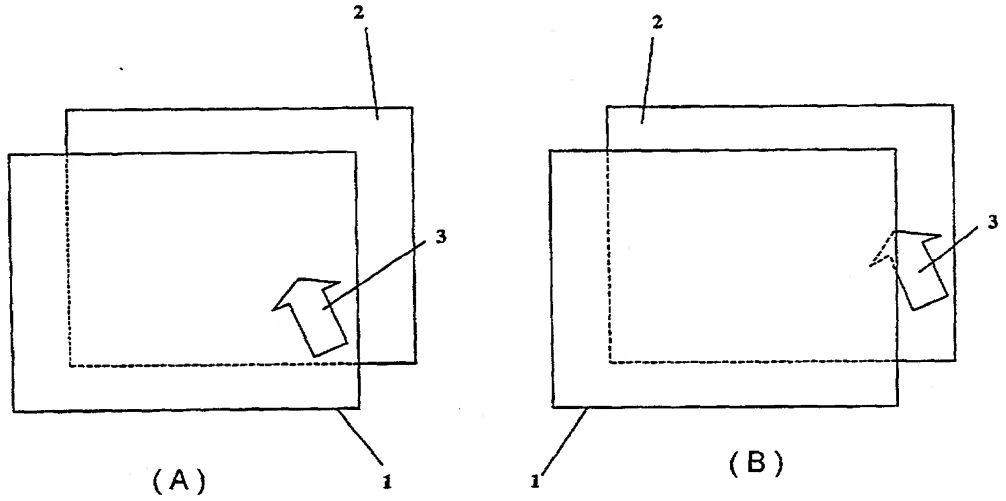
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:
— *With international search report.*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CONTROL OF DEPTH MOVEMENT FOR VISUAL DISPLAY WITH LAYERED SCREENS



(57) Abstract: A multi-level visual display system has a plurality of screens (1, 2) spaced in the depth direction. A user can move a visual indicator such as a cursor (3) between the screens (1, 2), via an input device such as a mouse button. In drawing applications a visual link such as a line can be created between two screens. In game applications a user can move an image both within and between screens (1, 2), by dragging a cursor while moving it between the screens, to provide an illusion of three dimensional movement. The screens (1, 2) may comprise layered liquid crystal displays.

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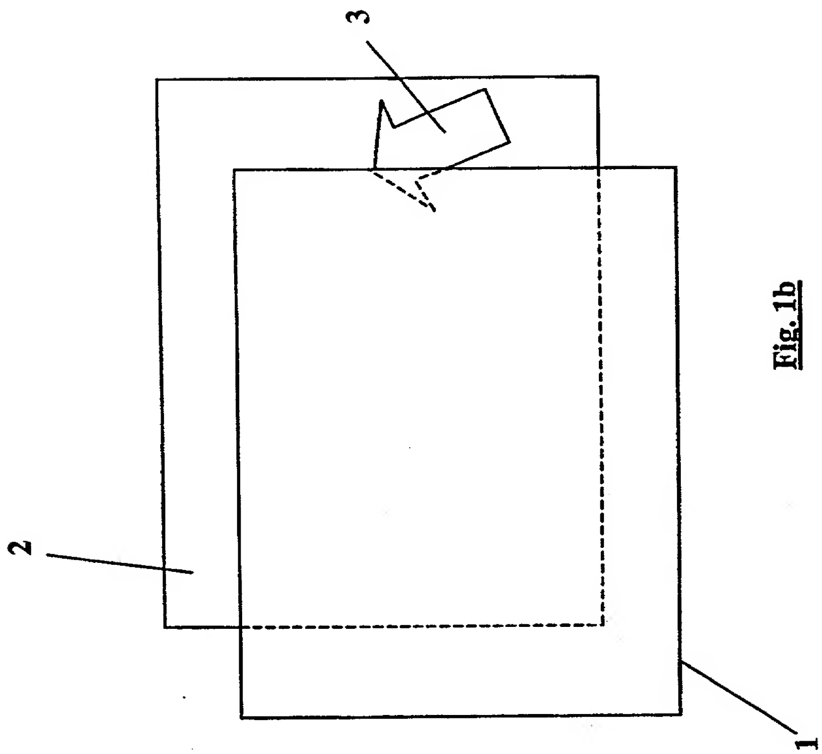

Fig. 1b

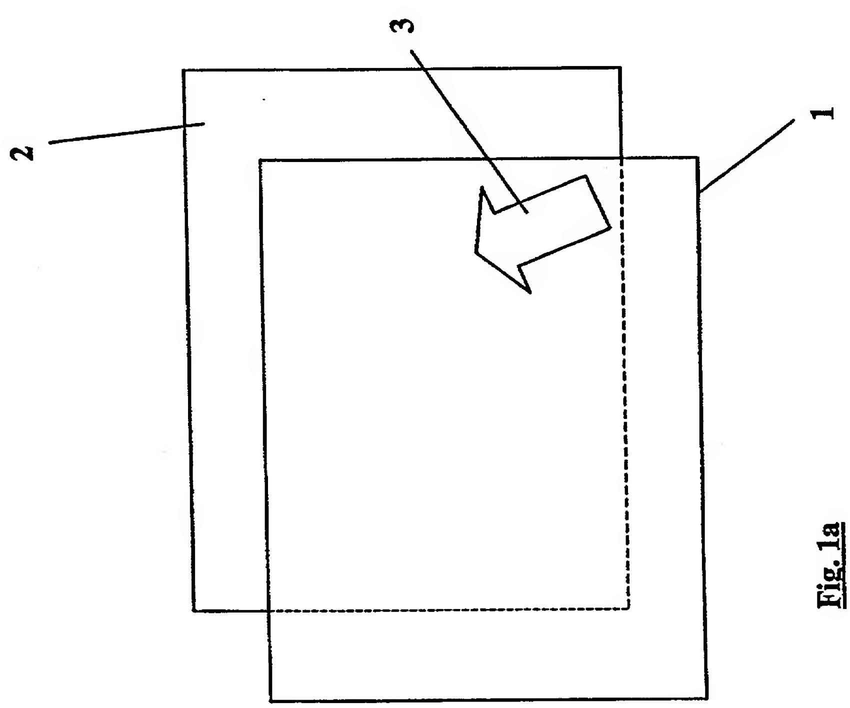

Fig. 1a

Fig. 1

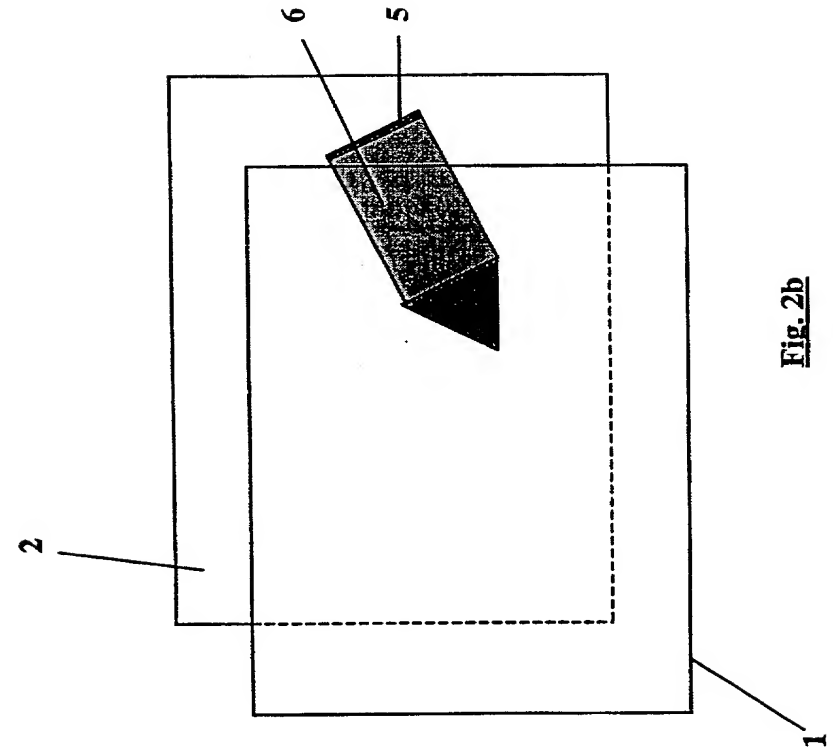

Fig. 2b

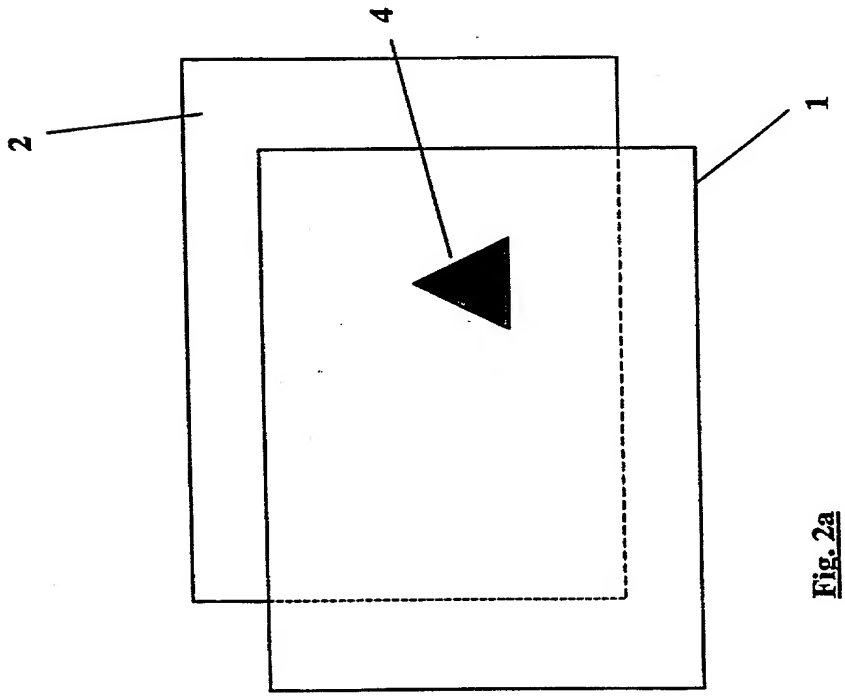

Fig. 2a

Fig. 2

Fig. 3

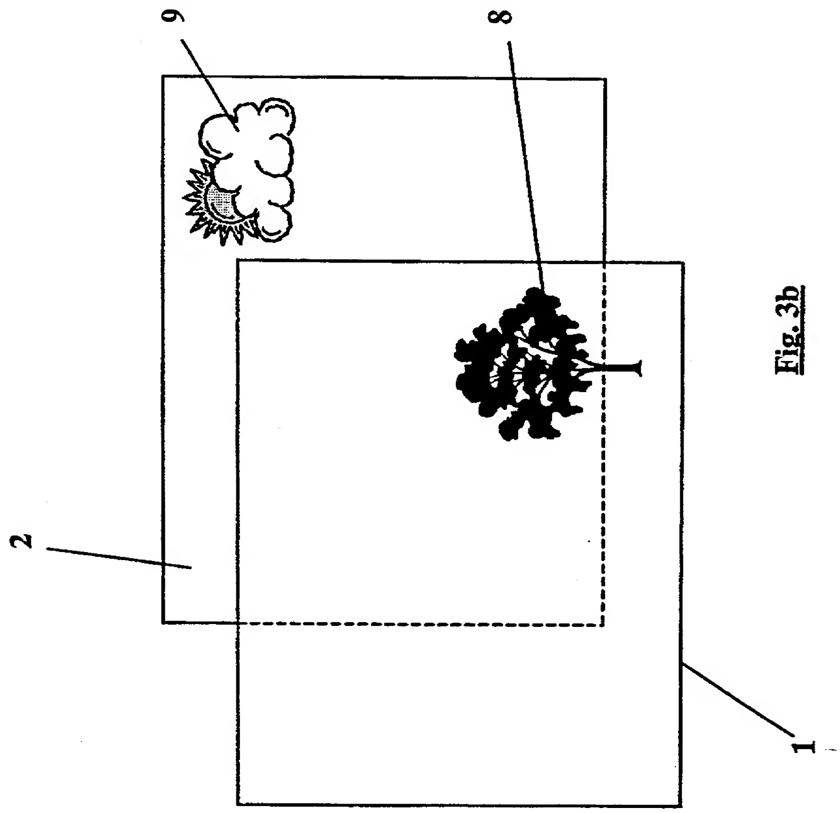

Fig. 3b

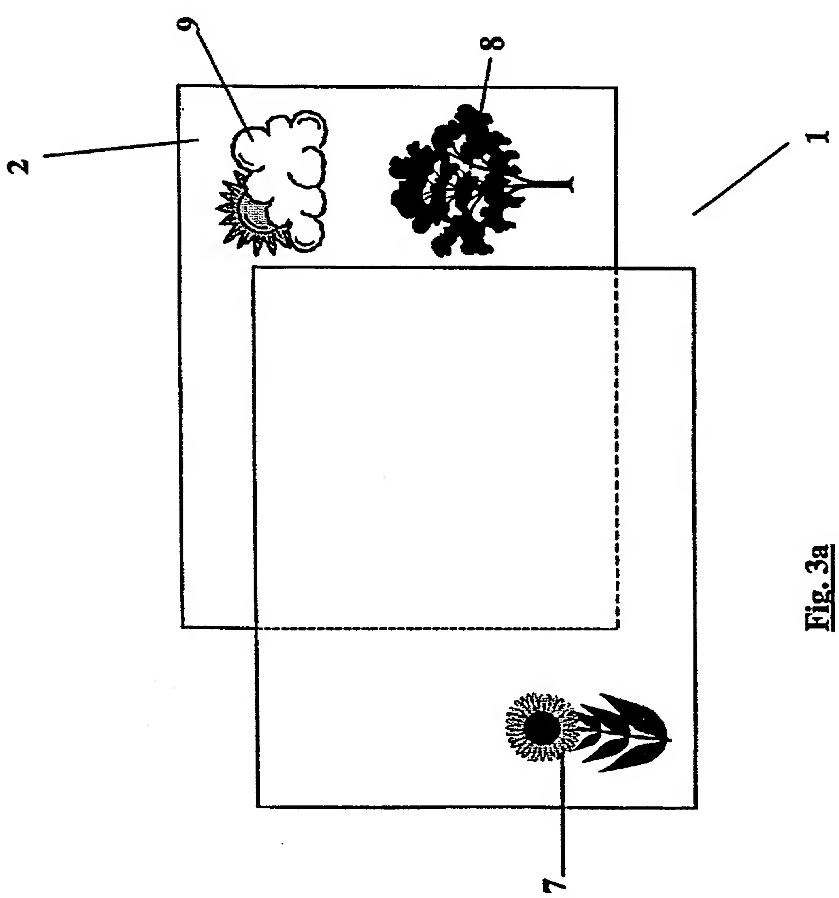

Fig. 3a

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PTO/SB/01 (10-00)
Approved for use through 10/31/2002. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

☐ Declaration Submitted with Initial Filing OR ☐ Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)

Attorney Docket Number	
First Named Inventor	
COMPLETE IF KNOWN	
Application Number	/
Filing Date	
Group Art Unit	
Examiner Name	

As a below named inventor, I hereby declare that:

My residence, mailing address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

CONTROL OF DEPTH MOVEMENT FOR VISUAL DISPLAY WITH LAYERED SCREENS.

(Title of the Invention)

the specification of which

☐ Is attached hereto

OR

☐ was filed on (MM/DD/YYYY) 08/19/99 as United States Application Number or PCT International Application Number WO 01/15132 and was amended on (MM/DD/YYYY) ☐ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached? YES	NO
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)

☐ Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

Please type a plus sign (+) inside this box → ☐

PTO/SB/01 (10-00)
Approved for use through 10/31/2002. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

DECLARATION — Utility or Design Patent Application

Direct all correspondence to: ☐ Customer Number or Bar Code Label [ ] OR ☑ Correspondence address below

Name DEEP VIDEO IMAGING LTD. ATTN: GARETH BELL

Address AIRPORT ROAD, RD2

Address MYSTERY CREEK

City HAMILTON | State | ZIP

Country NEW ZEALAND | Telephone +647 843 2560 | Fax +647 843 2562

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

NAME OF SOLE OR FIRST INVENTOR: ☐ A petition has been filed for this unsigned inventor

Given Name (first and middle [if any]) Gabriel Daemon | Family Name or Surname Engel

Inventor's Signature [signature] | Date Feb 1, 2002

Residence: City Hamilton | State | Country NZ | Citizenship US

Mailing Address 19A Rostrevor Street

Mailing Address

City Hamilton | State | ZIP 2001 | Country New Zealand

NAME OF SECOND INVENTOR: ☐ A petition has been filed for this unsigned inventor

Given Name (first and middle [if any]) Pita | Family Name or Surname Witehira

Inventor's Signature [signature] | Date 3/01/2002

Residence: City Hamilton | State | Country NZ | Citizenship NZ

Mailing Address Devine Road, RD3.

Mailing Address

City Hamilton | State | ZIP 2001 | Country New Zealand

☐ Additional inventors are being named on the ___ supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto.

[Page 2 of 2]

PTO/SB/02A (3-97)
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DECLARATION	**ADDITIONAL INVENTOR(S)** **Supplemental Sheet** **Page ___ of ___**

Name of Additional Joint Inventor, if any: ☐ A petition has been filed for this unsigned inventor

Given Name (first and middle [if any])				Family Name or Surname			
Inventor's Signature						Date	
Residence: City		State		Country		Citizenship	
Post Office Address							
Post Office Address							
City		State		ZIP		Country	

Name of Additional Joint Inventor, if any: ☐ A petition has been filed for this unsigned inventor

Given Name (first and middle [if any])				Family Name or Surname			
Inventor's Signature						Date	
Residence: City		State		Country		Citizenship	
Post Office Address							
Post Office Address							
City		State		ZIP		Country	

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Given Name (first and middle [if any])				Family Name or Surname			
Inventor's Signature						Date	
Residence: City		State		Country		Citizenship	
Post Office Address							
Post Office Address							
City		State		ZIP		Country	

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PTO/SB/02B (3-97)
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DECLARATION — Supplemental Priority Data Sheet

Additional foreign applications:

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached? YES	NO
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
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			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐

Additional provisional applications:

Application Number	Filing Date (MM/DD/YYYY)

Additional U.S. applications:

U.S. Parent Application Number	PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number *(if applicable)*

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PTO/SB/10 (1-99)
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STATEMENT CLAIMING SMALL ENTITY STATUS (37 CFR 1.9(f) & 1.27(c))–SMALL BUSINESS CONCERN

Docket Number (Optional)

Applicant, Patentee, or Identifier: Deep Video Imaging Limited.
Application or Patent No.: WO 01/15132
Filed or Issued: Filed
Title: Control of Depth Movement for a visual display with layered screens

I hereby state that I am
- ☐ the owner of the small business concern identified below:
- ☑ an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF SMALL BUSINESS CONCERN Deep Video Imaging Ltd

ADDRESS OF SMALL BUSINESS CONCERN Airport Road
Mystery Creek RD 2 Hamilton New Zealand

I hereby state that the above identified small business concern qualifies as a small business concern as defined in 13 CFR Part 121 for purposes of paying reduced fees to the United States Patent and Trademark Office. Questions related to size standards for a small business concern may be directed to: Small Business Administration, Size Standards Staff, 409 Third Street, SW, Washington, DC 20416.

I hereby state that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention described in:

- ☐ the specification filed herewith with title as listed above.
- ☑ the application identified above.
- ☐ the patent identified above.

If the rights held by the above identified small business concern are not exclusive, each individual, concern, or organization having rights in the invention must file separate statements as to their status as small entities, and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern, or organization having any rights in the invention is listed below:
- ☐ no such person, concern, or organization exists.
- ☑ each such person, concern, or organization is listed below. Deep Video Imaging Ltd

Separate statements are required from each named person, concern or organization having rights to the invention stating their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

NAME OF PERSON SIGNING Mr Koro Wikeepa

TITLE OF PERSON IF OTHER THAN OWNER Chief Financial Officer

ADDRESS OF PERSON SIGNING 71 Matangi Road RD1 Hamilton NZ

SIGNATURE K. Wikeepa DATE 3/2/2002
D M Y

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.